

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A telecommunication system comprising:

a first base station and a second base station, both capable of communicating by radio with a first terminal unit;

a telecommunication network capable of coupling the first base station to a second terminal unit over a first route and capable of coupling the second base station to the second terminal unit over a second route, whereby traffic data may be communicated between the first terminal unit and the second terminal unit via the first base station or the second base station, each of said first route and second route comprising at least one radio link segment and other non-radio link segments; and

a routing unit for determining whether the first terminal unit is to communicate with the second terminal unit via the first or second base stations in dependence on factors that include quality of at least part of the first and second routes, wherein said at least a part of the first and second routes is at least one of the other non-radio link segments.

2. (original) A telecommunication system as claimed in claim 1, wherein the routing unit is capable of initiating handover of radio communications between the first terminal unit and the base stations from one of the base stations to the other in dependence on factors that include the quality of at least part of the first and second routes.

3. (previously presented) A telecommunication system as claimed in claim 1, wherein the said factors include the quality of at least part of both the first and second routes.

4. (original) A telecommunication system as claimed in claim 3, wherein the routing unit is capable of comparing the quality of the first and second routes and making the determination that the first terminal unit is to communicate with the second terminal unit via the first or second base stations independence on that comparison.

5. (previously presented) A telecommunications system as claimed in claim 1, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

6. (previously presented) A telecommunications system as claimed in claim 1, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

7. (original) A telecommunication system as claimed in claim 6, wherein the estimation of quality is derived from a communication protocol.

8. (original) A telecommunication system as claimed in claim 7, wherein the protocol is RTCP (real-time control protocol).

9. (previously presented) A telecommunications system as claimed in claim 1, wherein at least part of the first and second routes is implemented by packet-based communications links.

10. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 1.

11. (previously presented) A method for determining routing in a telecommunication system comprising: a first base station and a second base station, both capable of communicating by radio with a first terminal unit, and a telecommunications network capable of coupling the first base station to a second terminal unit over a first route and capable of coupling the second base station to the second terminal unit over a second route, whereby traffic data may be communicated between the first terminal unit and the second terminal unit via the first base station or the second base station, each of the first and second routes comprising at least one radio link segment and other non-radio link segments; the method comprising:

estimating the quality of at least part of the first and second routes, wherein the at least a part of the first and second routes is at least one of the other non-radio link segments; and

determining whether the first terminal unit is to communicate with the second terminal unit via the first or second base stations independence on factors that include the quality.

12. (previously presented) A telecommunication system as claimed in claim 2, wherein the said factors include the quality of at least part of both the first and second routes.

13. (previously presented) A telecommunications system as claimed in claim 12, wherein the routing unit is capable of comparing the quality of the first and second routes and making the determination that the first terminal unit is to communicate with the second terminal unit via the first or second base stations in dependence on that comparison.

14. (previously presented) A telecommunications system as claimed in claim 2, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

15. (previously presented) A telecommunications system as claimed in claim 3, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

16. (previously presented) A telecommunications system as claimed in claim 4, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

17. (previously presented) A telecommunications system as claimed in claim 12, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

18. (previously presented) A telecommunications system as claimed in claim 13, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

19. (previously presented) A telecommunications system as claimed in claim 2, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

20. (previously presented) A telecommunications system as claimed in claim 3, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

21. (previously presented) A telecommunications system as claimed in claim 4, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

22. (previously presented) A telecommunications system as claimed in claim 5, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

23. (previously presented) A telecommunications system as claimed in claim 12, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

24. (previously presented) A telecommunications system as claimed in claim 13, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

25. (previously presented) A telecommunications system as claimed in claim 2, wherein at least part of the first and second routes is implemented by packet-based communications links.

26. (previously presented) A telecommunications system as claimed in claim 3, wherein at least part of the first and second routes is implemented by packet-based communications links.

27. (previously presented) A telecommunications system as claimed in claim 4, wherein at least part of the first and second routes is implemented by packet-based communications links.

28. (previously presented) A telecommunications system as claimed in claim 5, wherein at least part of the first and second routes is implemented by packet-based communications links.

29. (previously presented) A telecommunications system as claimed in claim 6, wherein at least part of the first and second routes is implemented by packet-based communications links.

30. (previously presented) A telecommunications system as claimed in claim 7, wherein at least part of the first and second routes is implemented by packet-based communications links.

31. (previously presented) A telecommunications system as claimed in claim 8, wherein at least part of the first and second routes is implemented by packet-based communications links.

32. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 2.

33. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 3.

34. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 4.

35. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 5.

36. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 6.

37. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 7.

38. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 8.

39. (previously presented) A cellular telephony telecommunications system employing the telecommunications system as claimed in claim 9.

40. (previously presented) The method of claim 11, wherein said step of estimating a quality comprises measuring quality based on a measured error rate in the at least part of the first and second routes.

41. (previously presented) The method of claim 11, wherein said step of estimating quality comprises determining a speed of communications in the at least part of the first and second routes.

42. (previously presented) The method of claim 11, wherein said step of estimating quality comprises measuring a consistency of a delay in the at least part of the first and second routes.

43. (previously presented) The method of claim 11, wherein said step of estimating quality comprises measuring physical characteristics of the at least part of the first and second routes.

44. (previously presented) A telecommunication system as claimed in claim 1, wherein the quality of the at least part of the first and second routes is based on a measured error rate in the at least part of the first and second routes.

45. (previously presented) A telecommunication system as claimed in claim 1, wherein the quality of the at least part of the first and second routes is based on a speed of communications in the at least part of the first and second routes.

46. (previously presented) A telecommunication system as claimed in claim 1, wherein the quality of the at least part of the first and second routes is based on a consistency of a delay in the at least part of the first and second routes.

47. (previously presented) A telecommunication system as claimed in claim 1, wherein the quality of the at least part of the first and second routes is based on measured physical characteristics of the at least part of the first and second routes.